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# 11. Non-Profit Applications of the Information Highways

## Comparing Grant Programs of the European Commission and the National Telecommunications and Information Administration (NTIA)<sup>1</sup>

*Marie d'Udekem-Gevers and Claire Lobet-Maris*

### Introduction

This chapter considers American and European policies relating to the design, or shaping, of the so-called "information society". In particular, we compare the political initiatives of the U.S. government and the European Commission which are aimed at stimulating telematics applications in non-profit sectors such as health care, education and training, culture, and administrative services. Traditionally, these sectors engage in a wide range of non-commercial activities which serve the public interest.

The key question raised in this chapter concerns the styles adopted by these two political institutions in building, or helping to build, innovative uses of information and communication technologies (ICTs). This question is important since the political style adopted influences the dynamism of the innovation process and the subsequent shaping of the information society. In our view, political style is more than a question of management. It is also a system of actions. This system of actions begins with the political vision engendered by the strategic interests of key actors in the debate - a vision which determines which actions will be endorsed; which procedures and regulatory devices will be invoked; and which roles will become available to states, industries, and users.

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The first section of the chapter relates the strategic context and the political background of specific programmes launched by the U.S. government and the European Union in the non-profit sector. In the second section, these telematics programmes are analysed in terms of their objectives, structures, actions, and key players. In comparing their different styles, we highlight how the different political styles may profoundly affect the on-going shaping of the information society in the U.S. and in Europe.

Our methodology consists of a comparison of official documents such as public reports, agendas for action, programmes, and lists of funded pilot projects. That is, it is exclusively concerned with formal and official levels of discourse. The task still remains to interweave the findings recounted in this chapter with developments "on the ground".

## The Information Society: Political Vision and Strategic Interests

### *The Political Contexts: Between Competitiveness and Democracy*

In 1992, President Clinton and Vice-President Gore announced the U.S. National Information Infrastructure (NII) Initiative. This stated that technology policy constitutes a crucial component in U.S. economic policy, and that the NII - or superhighway - is one of the most important elements of that proposed policy. The *NII Agenda for Action* produced in 1993 by senior representatives of U.S. administrations, through the Information Infrastructure Task Force (IITF), itemised a series of actions and goals to be endorsed by the U.S. government to complement private sector initiatives already underway (IITF 1993).

As Dutton et al (1994) point out, the philosophy underpinning the NII is that government is not responsible either for commissioning, or for building, the superhighway - that is to be left to private enterprise - but that, nevertheless, a governmental role remains for carefully crafting particular kinds of action to assure the growth of an information infrastructure available to all Americans at a reasonable cost. This philosophy explains why the U.S. government actively participates in shaping particular facets of the NII such as regulating telecommunications markets; funding high-risk pilot applications; overseeing the general security provisions of the system; and taking an active

role in smoothing the path towards the provision of universal services and non-profit applications.

In Europe, the publication of the White Paper in 1994 by Jacques Delors (then, President of the Commission) on *Growth, Competitiveness and Employment* (European Commission 1993) was the starting point for a series of actions to be taken by the Commission to facilitate a European version of the superhighway. In this White Paper, Delors pointed out the necessity to launch large technological programmes in the fields of transport and telecommunications in order to sustain Europe's growth, to assert its industrial competitiveness, and to address its serious unemployment problem. These objectives were quickly advanced by the Commission's gathering together of senior representatives of Europe's telecommunications and audio-visual industries to discuss the matter, resulting in a report by Martin Bangemann - the Commission's Director General for Industry - which was published in 1994 (Bangemann Group 1994).

Although the Bangemann report also strongly advocates that the building of a superhighway should be left to the private sector, and that the Commission should adopt a laissez-faire approach to developments in the telecommunications market, the proposed level of intervention - as itemised in the Commission's Action Plan (Commission Européenne 1994b) - is far more ambitious than that proposed by the U.S. government. The contrast is most obvious when we examine the Telematics Application Programme (TAP), which funds pilot applications which serve the public interest. In this programme, funding is not limited to the non-profit sector but also supports commercial projects. We may conclude that European initiatives actively aim to shape the market by means of supporting commercial ICTs. There is, therefore, a clear paradox in European policy: on one hand, the Commission argues for liberalisation and private enterprise and, on the other, it substantially finances those private initiatives.

### *Two Visions of the Non-Profit Sector*

Major differences exist between U.S. and European policies in how they define and include non-profit concerns in their action agendas. In the U.S., the IITF has developed a specific programme aimed at promoting applications for the public and non-profit sectors, called the Telecommunications and Infor-

mation Infrastructure Assistance Programme (TIAP). In addition, the IITF has launched a separate programme for commercial infrastructural and applications projects, called the Advanced Technology Programme (ATP). By comparison, as we saw earlier, Europe's non-profit programme - TAP - does not distinguish between commercial and non-commercial endeavour in this field. The distinct ways in which non-profit concerns are formulated and addressed in policy programmes reflect more than the pragmatics of managing the relevant R&D: they also suggest important differences in how that field is envisaged and defined.

In U.S. policy, non-profit applications are synonymous with non-commercial applications which serve the public interest. In European policy, non-profit sectors such as health care, administration, education, etc. are treated as arenas within which profitable applications may be developed and sold. There is a clear divergence between the two definitions. In the U.S., programmes which fund pilot projects for the non-profit sector pursue two objectives. The first is to augment the social welfare of citizens directly, and the second is to inject a kind of "telematics culture" into the population at large so that, once in place, it will - of itself - generate a demand for commercial ICTs. This is not the case in European policy, where the non-profit sector is explored for its commercial potential. This may explain why Europe does not have programme dedicated specifically to non-profit - meaning, non-commercial - enterprise.

In the long run, both approaches are clearly oriented towards the market. The difference, rather, is that the U.S. vision encompasses the intermediary step of generating a user-led demand for ICTs by means of funding projects which deliver its citizens direct social value-added. In contrast, the European vision only supports steps which lead directly to the delivery of marketable applications. Crudely, the U.S. vision is oriented towards users and the demand side of the equation, while the European vision is oriented towards producers and the supply side of the equation. As we will see, these different visions lead to a tremendous divergence between the kinds of pilot applications supported, or funded, by U.S. and European programmes in the non-profit sector.

## A Comparison of the U.S. and European Programmes

We will focus here on the major points of divergence between the American TIAP and the European TAP, under the following headings:

- the general goals of the programmes;
- the main criteria for applicants' participation and eligibility;
- the funded domains for applications;
- budgets.

### *General Goals of the Programmes: Citizens versus Industries*

The objectives of the U.S. TIAP programme, as we have seen, are oriented towards users and the demand-side. The U.S. government aims to "promote the widespread use of advanced telecommunications and information technologies in the public and non-profit sectors in order to build a nation-wide, interactive, multimedia information infrastructure available to all citizens, rural as well as urban" (NTIA 1995b). By contrast, Europe's TAP programme has an industrial focus. Its prime objective is "to promote the competitiveness of European industry and the efficiency of services of public interest and to stimulate job creation through the development of new telematics systems and services in such areas as telework and teleservices" (European Commission - DG XIII 1994d: i).

### *Main Criteria for Applicants' Participation and Eligibility:*

#### *A Users' Community versus a Producers' Consortium*

The U.S. TIAP is geared towards the user communities of non-profit entities. Applicants are drawn from "state and local governments, health care providers, school districts, libraries, universities, social service organizations, public-safety services, and other non-profit entities" (NTIA 1995d). The TIAP works on the principle of matching grants: the U.S. government will fund up to 50 percent of the total cost of a project, providing the applicant can resource the remainder from the private sector. This principle helps to ensure that private companies hold a vested interest in the project's success, and in its timely return on investment.

The European TAP targets the producers of services and applications. The programme is "open to any 'legal entity'... Legal entities may include industrial enterprises, ..... research organisations, educational institutions, users' organisations etc. The projects are open to national, regional and local authorities, appointed bodies, development boards and agencies" (European Commission - DG XIII 1994c: 7). In practice, most applications for support have come from industry, based on their assessment of likely user demand. TAP's funding principle is also based on cost-sharing although it can, and does, fund private companies. Thus, the TAP programme may dramatically affect whether a company retains a substantial interest in a project's success because it permits private risk to be substituted by public investment.

Another difference between the two programmes concerns how applicants may form consortia for the purpose of gaining project funding. In the TAP programme, the main criterion is that joint- or multi-applications must involve cross-national collaboration between member states (at least two states must be involved). In contrast, U.S. criteria emphasise that collaborating applicants should share similar social agendas. The European programme privileges projects which deliver something that will be transportable across member states. The U.S. approach is more contingent, focusing on applications which have a social proximity to each other for a defined group of users. If the concept of a "community of users" underpins U.S. criteria, those of the European programme are geared to strengthen the European Union by enforcing cooperation amongst member states whose social realities may sometimes differ profoundly. The policy underpinning TAP suggests that the building of the European information society relies on artificially-devised forms of cooperation.

Moreover, in contrast with the TIAP programme which is stimulating the emergence of the information society in the U.S. through supporting applications which have a proximity of contents for a defined user group, the TAP programme promotes generic pilot applications that can be used all over Europe. Let us take an example from the field of health care. In the U.S., funding has been given to the Public Health Services of New York to assist their AIDS-prevention campaign. In Europe, TAP only funds generic disease-prevention projects, and would refuse to consider an application which benefited only one region (unlike the New York example we have seen) or only one illness (such as AIDS).

### *Funded Domains for Applications*

Analysing the contents of both programmes (i.e., which projects are selected for funding) brings us to another important difference between U.S. and European policy. The European programme (European Commission - DG XIII 1994d) sets out complex criteria for the fields, and domains of interest, for which an applicant can make a submission. The programme offers support for ICT pilot projects which - when all are mapped together - combine R&D into applications for vertically-integrated markets, with horizontally-integrated research into related engineering activities. TAP thoroughly prescribes which range of applications fall within its remit; which markets and domains of interest count as eligible; and which methodologies must be followed. Applicants must meet these stringent constraints, if they are to succeed in their submissions. By contrast, the American programme is more open: it consists only of a list of potential application domains (NTIA 1995a; NTIA 1995c). Starting with this simple list, applicants define their projects according to their own frames of reference, leaving them greater freedom to define the project's scope.

To some extent, U.S. strategy is more liberal since it enables users to decide what development is relevant, according to their own perception of the problem being addressed. This difference highlights a contradiction in European rhetoric since, on one hand, the Commission advocates a laissez-faire approach to the building of the information society while, on the other, all submissions for funding must tally with TAP's prescribed remit for supporting ICT developments.

To compare the application domains supported by each programme, we will analyse the TIAP 1994 awards (NTIA 1995c) and the TAP 1994 awards (European Commission -DG XIII 1994d). Despite the different scope of each programme, we can still identify some equivalences between the fields supported by both (see Table 1).

USA TIIAP 1994		EU TAP 1994 - 1998	
Domains	Budgets MECU	Domains	Budgets MECU (Call for Proposals)
Governments + Public Information	3	Administration	25
		Transport	117
		Research	26
K-12 Education + Higher Education	4	Education & Training	34
Libraries Services	1.5	Libraries	
Science	0.2		
Community Information	5.7	Urban & Rural Areas	25
Health	3.6	Healthcare	70
		Disabled & Elderly People	
		Environment	15
Arts & Culture	0.2		
		Other Exploratory Actions	
Social Services	0.7		
Public Safety	0.1		
		Telematics Engineering	
		Language Engineering	23
		Information Engineering	
		Programme Support Actions	21
		(Specific Measures for SMEs)	15
	18.9		371

Table 1: Comparison between Domains and between Detailed Budgets (MECU) of the 1994 TIIAP and of the Telematics Applications Programme

Some fields are identical. Both programmes support ICT developments for education (Education and Training in TAP, K-12 Education and Higher Education in TIIAP); for libraries (Libraries in TAP, and Library Services in TIIAP); and for health (Healthcare in TAP, and Health in TIIAP). Other domains which receive support are not identical, though they are correlated. To some extent, TAP's Administration category matches two categories of domain in the 1994 TIIAP i.e. Government, and Public Information. There are also some overlaps between the Community Information Sector in TIIAP, and the Urban and Rural Areas domain in TAP.

However, there is some lack of conformity between the two programmes concerning the fields which are eligible for support. The 1994 TIIAP supports the domains of Science, Arts and Culture, Social Services, and Public Safety. These have no equivalent in the European TAP programme. Equally, TAP supports the domains of Transport, Research, Disabled and Elderly People, Environment, Other Exploratory Actions, Telematics Engineering, Language Engineering, Information Engineering, and Programme Support Actions. These domains do not receive support from the 1994 TIIAP.

A full description of the differences between U.S. and European investments into specific application domains requires further analysis and is beyond the immediate concerns of this chapter.

### *Budgets: Catalyst versus Support*

Before comparing their budgets, we must first point out a crucial difference between the two programmes concerning the length of projects. TIIAP time-scales are shorter than TAP's are: projects funded by TIIAP last between 12 and 24 months (NTIA 1995b), while TAP projects may last for up to four years (European Commission - DG XIII 1994c).

Concerning global budgets, the TIIAP grants awarded a total of \$24.4 million (18.9 MECU) in 1994 (NTIA 1995d), and a total of \$35.7 million (27.6 MECU) in 1995 (NTIA 1995e). In 1994, TAP's total budget was 843 MECU and a further 371 MECU was available for the Call for Proposals (European Commission - DG XIII 1994c). Thus, for equivalent periods, TAP's budget is more than nine times higher than TIIAP's budget. In this sense, the TIIAP budget can be understood as a "catalyst budget" which is geared to kick-start certain innovative applications, where the European

budget is designed to offer full support for ICT developments over a much wider range of domains. Furthermore, there are other U.S. programmes besides TIIAP which overlap with TAP's remit. For example, the U.S. ATP - which supports private sector initiatives - distributes grants of between \$20 million (14.7 MECU) and \$50 million (38.7 MECU) per year (NIST 1994). Thus, we must be very careful in how we interpret differences between TAP and TIIAP budgets.

We will now turn to compare the proportion of each budget which is allocated to different domains though we must bear in mind that, at present, the only available budgetary break-down for TAP is that concerning TAP's Call for Proposals (European Commission - DG XIII 1994b). Table 1 highlights the differences between the two programmes with respect to the domains which have received grant support. In Europe's TAP, the best-funded domains are Transport (117 MECU) and Healthcare (70 MECU). By contrast, the domains which have received most support from TIIAP are Community Information (5.7 MECU) and K-12 Education and Higher Education (4 MECU).

## Conclusion

This chapter compares the U.S. TIIAP with its nearest European equivalent, TAP. The two programmes are quite distinct (see Table 2). TIIAP's objective is to provide American citizens with access to the information society, whereas TAP's aim is to promote the competitiveness of the European Union. TIIAP funds are largely ear-marked for use by coherent non-profit entities, or by state and local government collaborators. TAP essentially serves industrial enterprise by means of supporting - artificially - cross-national collaborations. TAP's scope is the more ambitious of the two, and its budget is commensurately larger. Above all, we find a marked divergence between the approaches adopted by the two programmes. TIIAP funds bottom-up user group initiatives, whereas TAP exists to facilitate the top-down vision endorsed by the European Commission.

A comparison of TIIAP and TAP is useful precisely because it reveals the chasm separating U.S. and European political visions of the information society. The task still remains to measure the effect of these political differences

over time as the information superhighway begins to move from vision to implementation.

	USA TIIAP	EU TAP
<i>Goal</i>	access for all citizens	competitiveness
<i>Main funded participants</i>	* state & local government/ non-profit entities * within spontaneous collaborations	* industrial enterprises * within trans-national and artificial collaborations
<i>Scope</i>	* only non-profit domains * limited and realistic	* no distinction between profit and non-profit * wide and ambitious
<i>Budgets</i>	1994: 18.9 MECU 1995: 27.6 MECU	1994- 1998: 843 MECU (global budget)
<i>Approaches</i>	bottom-up --> stress on the initiatives of applicants	up-bottom --> stress on the 'model' proposed by the EU.

Table 2: *Synthesis*

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*Analysed documents are available at the following addresses:*

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